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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/536,926 | 05/31/2005 | Kazumi Aoyama | 450100-04849 | 6572 |
| 7590 William S Frommer Frommer Lawrence & Haug 745 Fifth Avenue New York, NY 10151 | | | | |
| | | | EXAMINER OPSASNICK, MICHAEL N | |
| | | | ART UNIT 2626 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/536,926

Applicant(s)

AOYAMA ET AL.

Examiner

MICHAEL N. OPSASNICK

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/19/2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/1/2010 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukui (5918222) in view of Tumey (7062073) in view of Freeman (5340317).

As per claim 1,36, Fukui (5918222) teaches a dialog control device/robot characterized by comprising: memory means for storing various pieces of information appended to an object as

values corresponding to respective items of the object (fig. 94, col. 46 lines 15-16); and conversation generation means for selecting, in response to an item of said object defined as topic, another topic relating to the topic used in the immediately preceding conversation (as topics – fig. 94, col. 46 lines 30-60); and generating an acquisition conversation for acquiring the value of the item selected as topic (as value-topic relationship – col. 61 lines 17-22) or a utilization conversation for utilizing the value of the item in the topic already stored in said memory means as the next conversation (col. 46 lines 30-45); said conversation generation means being adapted to store the acquired value acquired by said acquisition conversation as the value of the corresponding item (as generating the next conversation based on topic change – col. 52 lines 19-25, 47-49). Fukui (5918222) only teaches speech recognition, but does not disclose image recognition; however, Tumey (7062073) teaches the identification of the user both with speech and image (Tumey (7062073), abstract, col. 4 lines 38-57). Therefore, it would have been obvious to one of ordinary skill in the art of robotic/human interfaces to modify the user interface of Fukui (5918222) to have the capability of both speech recognition and image recognition, as taught by Tumey (7062073), because it would advantageously enhance the interaction experience between robot and user (col. 3 lines 35-47). The combination of Fukui (5918222) in view of Tumey (7062073) does not explicitly teach customization of a conversation, however, Freeman (5340317) teaches user customizable speech conversational system (Freeman (5340317), abstract, col. 7 lines 47-65; in a robot environment – col. 23-26, example 6). Therefore, it would have been obvious to one of ordinary skill in the art of conversational development to modify the teachings of the combination of Fukui (5918222) in view of Tumey (7062073) with user customizable conversation based on previous responses

because it advantageously provides a realistic conversation to the user (Freeman (5340317), col. 2 lines 45-60).

As per claims 2-11, the combination of Fukui (5918222) in view of Tumey (7062073) in view of Freeman (5340317) teaches the device according to claim 1, wherein said conversation generation means selects: any other item, relating to, differing relationships between the object, topic and values used in said immediately preceding conversation belongs as the next topic and generates said utilization conversation by utilizing the value of the item already stored in said memory means (Fukui (5918222)) as changing to next topic based on values extracted from the user – col. 52 lines 19-45; figs. 2, 12, 22, 189-193).

As per claims 12-14, the combination of Fukui (5918222) in view of Tumey (7062073) in view of Freeman (5340317) teaches the device according to claim 1, wherein said conversation generation means includes: memory acquisition conversation generation means for generating said acquisition conversation; memory utilization conversation generation means for generating said utilization conversation; situation judgment means for selecting either said memory acquisition conversation generation means or said memory utilization conversation generation means and have said memory acquisition conversation generation means or said memory utilization conversation generation means, whichever selected, generate said next conversation; wherein the situation judgment decides memory acquisition or memory utilization based on a ratio of acquired/non-acquired items and first extent is different than the second

extent (Fukui (5918222)) as decision based upon conversation state, judging whether more information is needed, and acquiring/accessing the information -- figs. 167, 169, 171).

As per claims 15, 16, the combination of Fukui (5918222) in view of Tumey (7062073) in view of Freeman (5340317) teaches the device according to claim 1, wherein said conversation generation means holds history of the used topics and generates said acquisition conversation or said utilization conversation by referring to the history, and not using the same topic via history information (Fukui (5918222), col. 9 lines 1-25).

As per claims 17, 18, the combination of Fukui (5918222) in view of Tumey (7062073) in view of Freeman (5340317) teaches the device according to claim 1, wherein said memory means stores the values of the items of said object along with their respective degrees of impression that provide reference for deciding if any of the values may be used in the conversations with said object or not and said conversation generation means selects the topic to be used in the next conversation on the basis of the degree of impression thereof; and internal condition management means adapted to hold parameters indicating the internal condition and change the values of the parameters according to external stimuli; each of said degrees of impression representing the difference of the parameter values of the corresponding parameter held by said internal condition management means before and after the acquisition of the corresponding value (Fukui (5918222)), as generating expression scores including likelihood and strength, prediction, system response contents -- figs. 173-176; including degree of expression, figs. 177-179)

Claims 19-35 are method claims that are performed by the apparatus claims 1-18 and as such, are similar in scope and content to claims 1-18 and therefore, claims 19-35 are rejected under similar rationale as presented against claims 1-18 above.

Response to Arguments

4. Applicant's arguments filed 09/28/2010 have been fully considered but are not persuasive. As per applicants arguments, examiner disagrees and rebuts: 1) Fukui discloses the conversation being acquired, which fills the claim requirement of voice recognition process(c.g.- Detailed Description Text (63); examiner notes that the use of the Tumey reference to address image recognition) ;the demand reception unit 103 extracts the user's intention from the input data (step S207 in FIG. 3). Processing such as natural language analysis, speech recognition, expression recognition, and the like is performed for each input data modality such as a text, speech, or image data. The intention of the user is determined in accordance with a combination of analysis results; the introduction of the Freeman reference is to show the development of the one-on-one between robot and user, and that it is the combination of Fukui in view of Tumey in view of Freeman that addresses the input as speech, with the furtherment of the interaction as disclosed by Freeman.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (571)272-7623, who is available Monday-Friday, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Richemond Dorvil, can be reached at (571)272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael N. Opsasnick/
Primary Examiner, Art Unit 2626
11/6/2010